

9/28 14:23:45 01

1 **M S R Y L R P P N T S L F V R N V A D D T R S E D L R R E F** 399781
 1 **M S R Y L R P P N T S L F V R N V A D D T R S E D L R R E F** GI 2961149

31 **G R Y G P I V D V Y V P L D F Y T R P R G F A Y V Q F E D** 399781
 31 **G R Y G P I V D V Y V P L D F Y T R P R G F A Y V Q F E D** GI 2961149

61 **V R D A E D A L H N L D R K W I C G R Q I E I Q F A Q G D R** 399781
 61 **V R D A E D A L H N L D R K W I C G R Q I E I Q F A Q G D R** GI 2961149

91 **K T P N Q M K A K E G R N V Y S S S R Y D D Y D R Y R S R** 399781
 91 **K T P N Q M K A K E G R N V Y S S S R Y D D Y D R Y R S R** GI 2961149

121 **S R S Y E R R S R S R S F D Y N Y R R S Y S P R N S R P T** 399781
 121 **S R S Y E R R S R S R S F D Y N Y R R S Y S P R N S R P T** GI 2961149

151 **G R P R R E A I P T M I D Q T A A G I P S T V L L T T L Q** 399781
 151 **G R P R R E A I P T M I D Q T A A G I P S T V L L T T L Q** GI 2961149

181 **E R S E S G K R T K E G Q F K R P K G G W K V L Q Y E - - Y** 399781
 157 **- R S H S D N - - - - - D R P N C S W N T - Q Y S S A Y** GI 2961149

209 **C T N I L T L V** 399781
 178 **Y T S - - R K I** GI 2961149

FIGURE 1

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1 MN S Q P Q T R S P F F Q R P Q I Q P P R A T I P N S S P S 1252206
 1 M S G A R T A S T P - GI 2660712

31 I R P G A Q T P T A V Y Q A N Q H I M M V N H L P M P Y P V 1252206
 19 L E P Q A N G E T P - GI 2660712

61 P Q G P Q Y C I P Q Y R H S G P P Y V G P P Q K Y P V Q P P 1252206
 36 - - - - - - - - P D D R S Q G A I I A D R P G - - - - - - - - - - GI 2660712

91 G P G P E Y P G P G D F P N A Y G T P F Y P S Q P V Y Q 1252206
 51 - - - - - L P G P E H S - GI 2660712

121 S A P I I V P T Q Q Q P P P A K R E K K T I R I R D P N Q G 1252206
 58 - - - - - P S E S Q P S S P S P T P S P V L E P - - - - - - - - GI 2660712

151 G K D I T E E I M S G G S R N P T P P I G R P T S T P T P 1252206
 79 - - - - - - - - - - - G S E P N L A V L S T P G D T M T T T GI 2660712

181 P Q L P S Q V P E H S P V V Y G T V E S A H L A A S T P V T 1252206
 97 T Q M S - - V E E S T P I S R E T G E P Y R L S - - - - - - - - GI 2660712

FIGURE 2A

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211 A A S D Q K Q E E K P K P D P V L K S P S P V I R L V L S G 1252206
 119 - - - - - - - - - P E P T P L - - - A E P T I L E V E V T L GI 2660712

241 E K K E Q E G O T S E T T A I V S I A E L P L P P S P T T V 1252206
 136 S K P V P E S E F F S S - - - - - - - - P L Q A P - - - GI 2660712

271 S S V A R S T I A A P T S S A L S S Q P I F T T A I D D R C 1252206
 153 T P L A S H T V E I H E P N G M V P S E D L E P E V E S S P GI 2660712

301 E L S S P R E D T I P S L T S C T E T S D P L P T N E N 1252206
 183 E L A P P P - - - - - - - - A C P S E S - - - - - - - GI 2660712

331 D D D I C K K P C S V A P N D I P L V S S T N L I N E I N G 1252206
 195 - - - - - P V P T A P T A Q P - - - - - - - - - - - GI 2660712

361 V S E K L S A T E S I V E I V K Q E V L P L T L E L E I L E 1252206
 205 - - - - - - - - - E E L L N G A P S P P A V D L S P V S GI 2660712

391 N P P E E M K L E C I P A P I T P S T V P S F P P T P P T P 1252206
 224 E P E E Q A K E - - V T A S V A P P T I P S A T P A P S GI 2660712

FIGURE 2B

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421	P A S P P H T P V I V P A A T T V S S P S A A I T V Q R V	1252206
252	A T S P A Q E E M E E E E E E E E G E A G E A E S E	GI 2660712
451	L E E D E S I R T C L S E D A K E I Q N K I E V E A D G Q T	1252206
282	K G G E L - - - L P P E S T P I P A N L - - - - -	GI 2660712
481	E E I L D S Q N L N S R R S P V P A Q I A I T V P K T W K K	1252206
300	- - - - S Q N L E A - - A A A T Q V A V S V P K R R R K	GI 2660712
511	P K D R T R T E E M L E A E L E L K A E E L S I D K V L	1252206
322	T K E L N K K - - E A V G D L L D A F K E A N P A V P E V -	GI 2660712
541	E S E Q D K M S Q G F H P E R D P S D L K V K A V E E N G	1252206
349	- - E N Q P P A G S N P G P E S E G - - - S G V P P R P	GI 2660712
571	E E A E P V R N G A E S - V S E G E G I D A N S G S T D S S	1252206
372	E E A D E T W D S K E D K I H N A E N I Q P G E Q K - - -	GI 2660712
600	G D G V T F P F K P E S W K P T D T E G K Q Y D R E F L L	1252206
398	- - - - Y E Y K S D Q W K P P N L E E K K R Y D R E F L L	GI 2660712

FIGURE 2C

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630	D F Q F M P A C I Q K P E G L P P I S D V V L D K I N Q P K	1252206
423	G F Q F I F A S M Q K P E G L P H I S D V V L D K A N - - K	GI 2660712
660	L P M R T L D P R I L P R - - - G P D F T P A F A D F G R Q	1252206
451	T P L R P L D P T R L Q G I N C G P D F T P S F A N L G R T	GI 2660712
687	T P G G R G V P - - - - - - - - - - - - - L L N V G S R R S Q	1252206
481	T L S T R G P P R G G P G G E L P R G P Q A G L G P R R S Q	GI 2660712
705	P G Q R R E P R K I I - T V S V K E D V H L K K A E N A W K	1252206
511	Q G P R K E P R K I I A T V I M T E D I K L N K A E K A W K	GI 2660712
734	P S Q K R - - - - D S Q A D D P E N I K T Q E L F R K V R	1252206
541	P S S K R T A A D K D R G E E D A D G S K T Q D L F R R V R	GI 2660712
759	S I L N K L T P Q M F N Q L M K Q V S G L T V D T E E R L K	1252206
571	S I L N K L T P Q M F Q Q L M K Q V T Q L A I D T E E R L K	GI 2660712
789	G V I D L V F F E K A I D E P S F S V A Y A N M C R C L V T L	1252206
601	G V I D L T F F E K A I S E P N F S V A Y A N M C R C L M A L	GI 2660712

FIGURE 2D

819	K V P M A D K P G N T V N F R K L L N R C Q K E F E K D K	1252206
631	K V P T T E K P T V T V N F R K L L N R C Q K E F E K D K	GI 2660712
849	A D D D V F E K K Q K E L E A A S A P E E R T R L H D E L E	1252206
661	D D D E V F E K K Q K E M D E A A T A E R G R L K E E L E	GI 2660712
879	E A K D K A R R R S I G N I K F I G E L F K L K M L T E A I	1252206
691	E A R D T A R R R S L G N I K F I G E L F K L K M L T E A I	GI 2660712
909	M H D C V V K L L K N H D E E S L E C L C R L L T T I G K D	1252206
721	M H D C V V K L L K N H D E E S L E C L C R L L T T I G K D	GI 2660712
939	L D F E K A K P R M D Q Y F N Q M E K I V K E K T S S R I	1252206
751	L D F E K A K P R M D Q Y F N Q M E K I T K E K K T S S R I	GI 2660712
969	R F M L Q D V I D L R L C N W V S R R A D Q G P K T I E Q I	1252206
781	R F M L Q D V I D L R G S N W V P R R G D Q G P K T I D Q I	GI 2660712
999	H K E A K I E E Q E E O R K V Q Q L M T K - - E K R R - -	1252206
811	H K E A E M E E H R E H I K V Q Q L M A K G S D K R R G G P	GI 2660712

FIGURE 2E

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1024	-	<u>P G V Q R</u> - - -	-	<u>V D E G G W N T V Q G A K N S R V L D</u> 1252206
841	P G P	<u>P I S R</u> G L P L V D D G G W N T V P T S K G S R P T D		GI 2660712
1048	P S	<u>K F L K I T K P</u> -	<u>T I D E K I Q L V P K A Q L G S W G K</u> 1252206	
871	T S R L T	<u>K I T K P G S I D S N N Q L F A P G G R L S W G K</u>		GI 2660712
1077	G S S G G	- <u>A K A S E T</u> -	<u>D A L R S S A S S L N R F S A</u> 1252206	
901	G S S G G S G A K P S D A A S E A A R P A T S T L N R F S A		GI 2660712	
1103	L Q P P A P S G S T P S T P V E F D S R R T L T S R G S M G	1252206		
931	L Q Q A V P T E S T	- - - - - D N R R V V Q - R S S L S	GI 2660712	
1133	R E K N D K P L P S A T A R P N T F M R G G S S K D L L D N	1252206		
953	R E R G E K A - G D R G D R L E R S E R G G D R G D R L D R	GI 2660712		
1163	Q S Q E E Q R R	- - - E M L E T V K Q L T G G V D V E R N	1252206	
982	A R T P A T K R S F S K E V E E R S R E R P S Q P E G L R K	GI 2660712		
1189	S T E	- A E R N K T R E S A K P E I S A M S A H D - K A A	1252206	
1012	A A S L T E D R D R G R D A V K R E A A L P P V S P L K A A	GI 2660712		

FIGURE 2F

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1216	L S E E E L E R K S K S I I D E F L H I N D E K E A M Q C V	1252206
1042	L S E E E L E R K S K A I I E Y L H L N D M K E A V Q C V	GI 2660712
1246	E E L N A Q G L L H V F V R V G V E S T L E R S Q I T R D H	1252206
1072	Q E L A S P S L L F T I F V R H G V E S T L E R S A I A R E H	GI 2660712
1276	M G Q I L L Y Q L V Q S E K L S K Q D F F K G E S E T L E L A	1252206
1102	M G Q I L L H Q L L C A G H L S T A Q Y Y Q G L Y E T I L E L A	GI 2660712
1306	D D M A I D I P H I W L Y L A E L V T P M L K E G G I S M R	1252206
1132	E D M E I D I P H V W L Y L A E L V T P T I L Q E G G V P M G	GI 2660712
1336	E L T I E F S K P L L P V G R A G V L L S E I L H L L C K Q	1252206
1162	E L F R E I T K P L R P L G K A A S L L I L G L L C K S	GI 2660712
1366	M S H K K V G A L W R E A D L S W K D F L P E G E D V H N F	1252206
1192	M G P K K V G T L W R E A G L S W K E F L P E G Q D I G A F	GI 2660712
1396	L L E Q K L D F I E S D S P C S S E A L S K K E L S A E E L	1252206
1222	V A E Q K V E Y T L G E - - - E S S E A P G Q R A L P S E E L	GI 2660712

FIGURE 2G

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1426	Y K R L E K L I I E D K A N D E Q I F D W V E A N L D E I Q	1252206
1249	N R Q L E K L L K E G - S S N Q R V F D W I E A N L S E Q Q	GI 2660712
1456	M S S P T F L R A L M T A V C K A A I I A D S S T F R V D T	1252206
1278	I V S N T L V R A L M T A V C Y S A I F E T P - L R V D V	GI 2660712
1486	A V I K Q R V P I L L K Y L D S D T E K E L Q A L Y A L Q A	1252206
1307	A V L K A R A K L L Q K Y L - C D E Q K E L Q A L Y A L Q A	GI 2660712
1516	S I V K L D Q P A N L L R M F F D C L Y D E E V I S E D A F	1252206
1336	L V V T I E Q P P N L L R M F F D A L Y D E D V V K E D A F	GI 2660712
1546	Y K W E S S K D P A E Q N G K G V A L K S V T A F F T W L R	1252206
1366	Y S W E S S K D P A E Q Q G K G V A L K S V T A F F K W L R	GI 2660712
1576	E A E E E S E D N	1252206
1396	E A E E E S D H N	GI 2660712

FIGURE 2H

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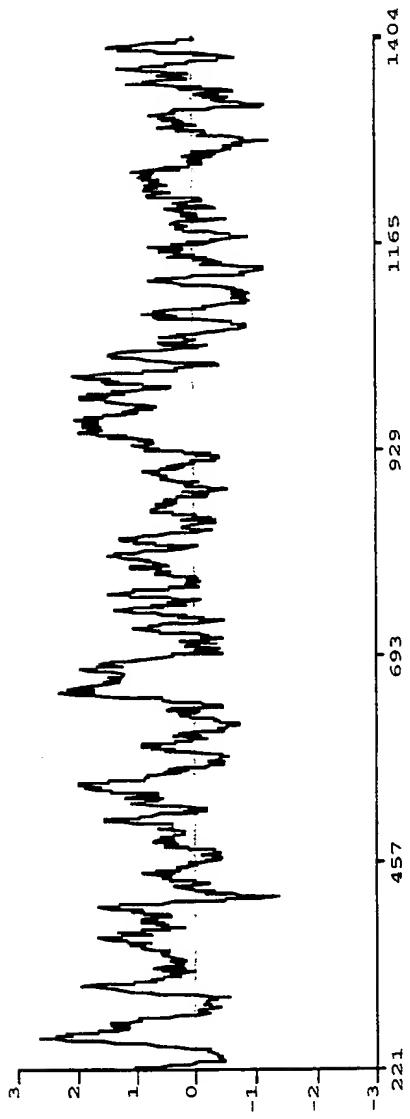


FIGURE 3A

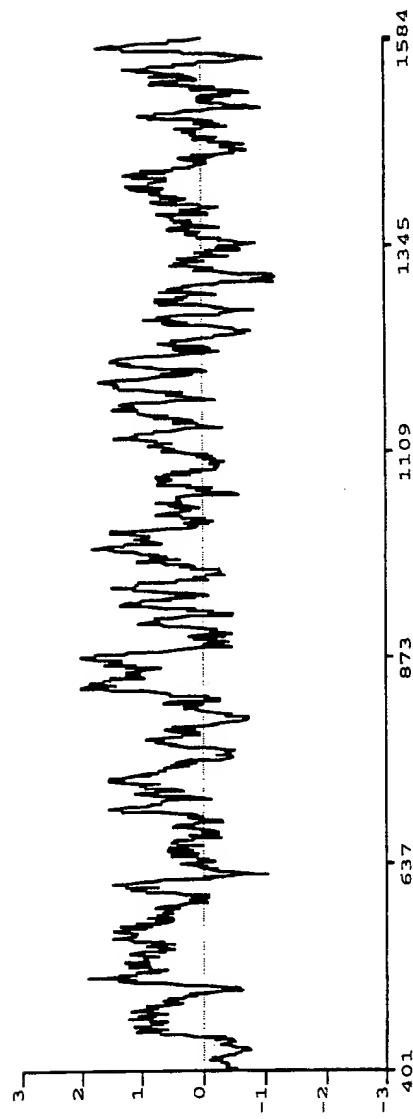


FIGURE 3B

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1	M - - - - -	2950994
	L R R G A R N W R S M S T G E L T P Q S R L K E F S E L A R	GI 2440051
2	- - - - -	2950994
31	A L N L Y R M D H L G N Y T G H K S Y Y L T G Q L A T L E Q	GI 2440051
2	- - - - -	2950994
61	A I I Q Y A L Q A V T E H G F K L I S V P D I L P K E V I E	GI 2440051
2	- - - - -	2950994
91	S C G M R T E G E R T Q V Y K L D T G E C L S G T S E M A L	GI 2440051
2	- - - - -	2950994
91	F G V T G P	2950994
121	A G F F A N K L L S E D Q L P L K V T A V S R C Y R A E T S	GI 2440051
8	GL - - - - -	2950994
151	GL Q E E K G I Y R V H Q F N K V E M F A I C T E E Q S E A	GI 2440051

FIGURE 4A

9 6787491 1624501

9 6787491 1624501

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15 L L E F L S L Q M E I L T E L G L H F R V L D M P T Q E L 2950994
 181 E L E E F K N I E V D L F R R L L G L N F R L L D M P P C E L GI 2440051

45 G L P A Y R K F D I E A W M P G R G R F G E V T S A S N C T 2950994
 211 G A P A Y Q K Y D I E A W M P G R Q M W G E I S S C S N C T GI 2440051

75 D F Q S R R L H I M F Q T E A - G E L Q F A H T V N A T A C 2950994
 241 D Y Q A R R L G I R Y R R S A D G Q I L H A H T I N G T A T GI 2440051

104 A V P R I L I A L L E S N Q Q K D G S V L V P P A L Q S Y L 2950994
 271 A I P R I L I A L L E S Y Q - K E D G I E I P A V L R P F M GI 2440051

134 G T D R - I T A P T H V P - - - L Q Y I G P N Q P R K P G 2950994
 300 D N Q E L I T R N K R I P E T K L V K F I K A GI 2440051

159 L P G Q P A V S
 322

FIGURE 4B

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FIGURE 5A

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181	<u>E D L Q K M K Q F A Q D F V M H T D V R T C S S S T S V I A</u>	3461657
25	- - - - -	- - - - -
211	<u>D L Q E D G V Y F S S Y G H Y G I H E E M L K D K I R T</u>	3461657
25	<u>- - - - - Y F D S Y A H F G I H E E M L K D E V R T</u>	GI 1808648
241	<u>E S Y R D F I Y Q N P H I F K D K V V L D V G C G T G I L S</u>	3461657
46	<u>L T Y R N S M F H N R H L F K D K V V L D V G S G T G I L C</u>	GI 1808648
271	<u>M F A A K A G A K K V L G V D Q S E I L Y Q A M D I I R L N</u>	3461657
76	<u>M F A A K A G A R K V I G I V C S S I S D Y A V K I V K A N</u>	GI 1808648
301	<u>K L E D T I T L I K G K I E E V H L P V E K V D V I I S E W</u>	3461657
106	<u>K L D H V V T I I K G K V E E V E L P V E K V D I I S E W</u>	GI 1808648
331	<u>M G Y F L L F E S M L D S V L Y A K N K Y L A K G G S V Y P</u>	3461657
136	<u>M G Y C L F Y E S M L N T V L Y A R D K W L A P D G L I F P</u>	GI 1808648

FIGURE 5B

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361	DICTISLVAVSDVNKHADRIAFWDGVGFK DRA[TLYVTA[EDRQYKDYKIHWWENVYGF	3461657 GI 1808648
391	MSCMKAVIPEAVVEVLDPKTLISEPCK MSCIKDVATKEPLVVDVQDVQDVQDVQDV	3461657 GI 1808648
196		
421	HIDCHTTSISSDLEFSSDFTLKITTSMCTA EVDTYTVKVEDLTFSTSPEFCLQVKRNDYVHA	3461657 GI 1808648
226		
451	LAGYFDIYFEKNCNRRVVFSTGPOSTKTHW LVAYFNTIEFTR-CHKRTGFSTSPESPYTHW	3461657 GI 1808648
256		
481	KQTVFLLEKPFSSVKAGEALKGVTVHKNKK KQTVFYMEDYLTIVKTTGEEIFGTTIGMRRPNNAK	3461657 GI 1808648
285		
511	DPRSLTVTLLN-----NSTOTYGLQ	3461657 GI 1808648
315	NNRDLDFTIDFDFKGO1CELSCSTDYRMNR	3461657 GI 1808648

FIGURE 5C